

0390181 03300

[Table 1]

	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
H-NBR (hydrogenation 80%)	100	100	100	100	100	100
Strontium-ferrite	870	870	-	-	609	609
Barium-ferrite	-	-	870	870	261	261
Silane coupling agent	1	1	1	1	1	1
Lubricating agent	3	3	3	3	3	3
Vulcanization agent (sulfur)	0.5	0.5	0.5	0.5	0.5	0.5
Carbon black	-	10	-	10	-	10
Vulcanization promoting agent						
CM	1.5	1.5	1.5	1.5	1.5	1.5
TT	1.0	1.0	1.0	1.0	1.0	1.0
PVI	0.3	0.3	0.3	0.3	0.3	0.3
Vulcanization promoting auxiliary agent						
Active zinc white	4	4	4	4	4	4
Stearic acid	3	3	3	3	3	3
Antioxidant	1.5	1.5	1.5	1.5	1.5	1.5
Polyester based plasticizer	3	3	3	3	3	3
Ferrite content ratio (%)	88.0	87.1	88.0	87.1	88.0	87.1
Magnetic characteristic (BH) _{max} /kJ·m ⁻³	12.3	11.5	8.2	7.8	9.9	9.2
Ordinary state physical property						
Hardness (pts)	96	97	92	93	94	96
Tensile strength (Mpa)	4.8	5.1	4.6	5.2	4.9	5.4
Stretch (%)	22	45	23	52	21	46
Heat resistance (150°C for 168 hours)						
Hardness change (pts)	+3	+2	+4	+3	+3	+2
Tensile strength change ratio (%)	+102	+90	+88	+95	+104	+101
Stretch change ratio (%)	-23	-20	-23	-30	-25	-26
Water resistance (70°C for 168 hours)						
Hardness change (pts)	-4	-2	-3	-2	-4	-2
Volume change ratio (%)	+4.2	+3.6	+4.1	+3.8	+4.1	+3.4
Grease resistance (120°C for 168 hours)						
Hardness change (pts)	-3	-2	-3	-3	-4	-3
Volume change ratio (%)	+1.4	+0.8	+1.1	+0.7	+1.3	+0.8
Average magnetic flux density on circumference of encoder (mT)	58.0	55.9	46.6	43.6	55.1	52.4
Variation of magnetic force with respect to average magnetic flux density (%)	15.4	16.2	8.0	8.2	10.2	10.5